National strategies to support WSP training, implementation, and advocacy of WSP

Water Safety Planning (WSP), an approach which aims at ensuring safe drinking-water thorough a comprehensive risk system assessment and management process since its adoption by the International Water Association (IWA) and World Health Organization (WHO) seeks to support achieving the Sustainable Development Goal (SDG) target 6.1 to provide safe drinking-water for all. According to IWA and WHO 2017, the WSP approach has been successfully applied to a variety of water supply systems globally and this has led to a number of benefits including improved system management, increased awareness among staff, increased knowledge sharing, communication and collaboration, as well as improved water quality.

Since the inclusion of WSPs in international reference documents in 2004 (3rd Edition of the World Health Organization’s Guidelines for Drinking-water Quality and the International Water Association’s Bonn Charter for Safe Drinking Water) national governments have included them in national legislation to promote their implementation. Below are some country specific WSP policies:
GHANA: The government of Ghana recognizes access to safe drinking-water as a basic human right and essential to protect public health and has made significant progress to raise the proportion of the population with access to improved water sources in the country. Following the World Health Organizations recommended risk-based approach in the management of drinking water quality, the Ministry of Water and Sanitation in Ghana has developed the National Drinking Water Management Framework to provide guidance to all water supply agencies on effective drinking-water quality management and public health protection through systematic identification of risks and implementation of Water Safety Plans, effective monitoring and evaluation, regulation and coordination of roles and responsibilities of all relevant stakeholder in the country.

KENYA: Kenya is water stressed, and this has led to the consideration of sound water resource management and sustainable development within its policies. The Water Services Regulatory Board (WASREB) established in 2003 under the Water Act 2002 is empowered to determine and prescribe national standards for the provision of water services and asset development for water services and this includes prescribing guidelines necessary for achieving water safety and maintaining the quality service. To support WSP implementation, they have developed a Guideline on Water Safety Planning to assist Water Service Providers to manage their water utilities appropriately for continuous provision of safe water to consumers.

ETHIOPIA: Ethiopia like many other African countries faces increasing severity of drought and flooding and hence, the desperate need to strengthen the management of drinking water sources. With majority of drinking water contamination of water sources across the country resulting from seasonal and flash floods, there has been significant efforts to address the susceptibility of vital drinking water sources against increasingly unpredictable weather conditions. In 2015, the Federal Ministry of Water, Irrigation and Energy (FMoWIE) has developed Strategic framework for Climate Resilient Water Safety Planning. This framework provides the strategic blueprint to develop a climate orientated risk assessment and management approach for drinking-water supplies, from catchment to consumer. Also there is the Guidelines for Urban Utility Managed Piped Drinking Water Supplies which provide stepwise information for urban water suppliers to develop, implement, monitor and review water safety plans.

SENEGAL: Senegal has made substantial improvements in its water supply sector and improved the overall management of the sector in terms of quality of service delivery, efficiency of operations, and cost recovery. The Ministry of Hydraulics and Sanitation (MHS) is responsible for the WSS national policies and strategies in the country. With regards to WSP, there is currently no existing policy or law to support implementation and the water supply provider, SEN’EAU refers to the recommendations from WHO supporting the implementation of WSP. There are plans from the MHS to implement a strategy for improving water quality based on the WSP approach.

BURKINA FASO: The national utility Office National de l’Eau et de l’Assainissement (ONEA) takes responsibility for urban water supply in the country. Since its establishment, the utility has made lots of improvement in terms of expanding access and improving service quality. In 2001, the Water Act was established to recognise the importance of clean water, decent toilets and good hygiene. Water policies and regulations have also been developed by General Directorate of Water Resources (DGRE) to support WSS but there is currently no policy in place to support WSP implementation. The utility refers to the recommendations from WHO to support and implement WSPs. Efforts have also been made the utility to incorporate WSP philosophies in all WSS projects.
In scaling up effective up of WSP implementation across these different countries, this worldwide accepted approach needs to be supported by tools, resources, regulations and policies, guidelines to create the enabling environment and support stakeholder participation at the national level.

**WSP Resources**

Some recommendations of resources that can support WSPs are described below:

Prior to the development of a WSP, training is key to empower and build the capacity of the utility. The Water safety plan training package consisting of three (3) main components, facilitator handbook, participant workbook and accompanying PowerPoint presentations. The structure of this training package is based on 13 learning modules based on the [WHO/IWA WSP Manual](#): Step by step risk management for drinking-water supplies and the [WHO/IWA WSP Quality Assurance Tool](#).

In 2010, the World Health Organization (WHO) and the International Water Association (IWA) published the WSP road map titled [“Think big, Start Small, Scale up. A Road map to Support Country-Level Implementation of Water Safety Plans”](#). This document provides a ‘road map’ to support country-level implementation of WSPs by providing guidance for country planners on how to initiate and carry out WSP implementation.

To download the French edition of this publication, please visit: [http://www.who.int/water_sanitation_health/publications/thinkbig-startsmall/fr/](http://www.who.int/water_sanitation_health/publications/thinkbig-startsmall/fr/)

Planning to prepare and implement WSP, the management of a water utility needs to ensure that climate resilience as a long-term established approach is considered in its planning approach plan. Climate change impacts on services delivery can be too costly for water utilities to handle unless there is a long-term plan that is climate aware. The manual on “[Climate-resilient water safety plans: Managing health risks associated with climate variability and change](#)” provides guidance on how climate considerations can be integrated into water safety planning to provide greater resilience to the current and predicted impacts of climate change and variability on water supplies.

To further support planning, [Strategic Recommendations for Climate Smart Utilities](#) has been developed to provide information to water utilities on why it is important to take into account climate variability and change, and how climate information can be integrated into their planning processes. Also, [Guideline for Interpreting Climate Information for Application in Water Safety Planning](#) has been developed to assist water utilities analyze climate related data and incorporate those findings into their water safety planning processes.

To support advocacy, [“Strengthening operations and maintenance through water safety planning”](#), a collection of case studies from six countries highlights the benefits derived from WSP implementation. WSPs are valuable tools that can be used to strengthen O&M programmes and result in a wide range of improvements across systems of various types, sizes and resource levels globally. Also, to understand progress on Water Safety Plans (WSP) to date and to inform the future WSP support agenda, WHO and IWA have undertaken a [Global status report on WSP](#) based on experiences and information gathered from 118 countries. This report provides a comprehensive picture of WSP uptake globally and presents information on WSP implementation and the integration of WSPs into the policy environment.

To support the enforcement of WSP in drinking-water policies or regulations, there is the need for ongoing WSP auditing, i.e. independent and systematic checks of WSP completeness, implementation in...
practice and effectiveness. The WHO/IWA document *A practical guide to auditing water safety plans* provides guidance on developing and implementing a WSP auditing scheme, covering such topics as the aim and role of auditing, auditor training and certification, audit criteria, audit timing and frequency and audit reporting. The guidance document includes examples, tips, tools and case studies from more than a dozen low-, middle-, and high-income countries, and it serves as a practical resource for policy makers, government bodies responsible for drinking-water regulation or surveillance and water suppliers implementing WSPs.

To download the French edition of this publication, please visit https://wsportal.org/resource/guide-pratique-pour-laudit-des-plans-de-gestion-de-la-securite-sanitaire-de-leau/

The ‘Water safety planning A roadmap to supporting’ resources provides partners provide guidance on various aspects of water safety planning, such as water safety plan (WSP) development, implementation, training, advocacy and auditing.

Visit the Water Safety Portal-An online global forum for all WSP stakeholders to find resources, share experiences and keep up-to-date on WSP news and events for more information.

**About the International Water Association**

The International Water Association (IWA) is a network and an international global knowledge hub open to all water professionals and anyone committed to the future of water. With a legacy of over seventy years, IWA connects water professionals around the world to find solutions to global water challenges as part of a broader sustainability agenda. As a non-profit organization and with a membership in more than 140 countries, the IWA connects scientists with professionals and communities so that pioneering research offers sustainable solutions. In addition, the association promotes and supports technological innovation and best practices through international frameworks and standards. Through projects, events, and publications, IWA engages with its members to stimulate innovation and facilitate content from its members to support IWA’s vision of a water-wise world.

IWA has contributed to Water Safety Planning (WSP) through specialist groups, publications, events, and projects. This includes supporting the implementation of WSPs in various countries across Africa including: Burkina Faso, Ghana, Guinea, Kenya, Liberia, Morocco, Senegal, Sierra Leone, South Africa, Tanzania and Uganda.

This document on national strategies was supported with funding from OPEC Fund for International Development (OFID), under the Climate Resilient Water Safety Planning Project.

Find out more about this project and IWA’s activities on WSP at: https://iwa-network.org/projects/water-safety-planning/

For more information, please visit www.iwa-network.org